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ABSTRACT

The extensive body of research and knowledge on adult learners, has rarely been applied to teachers, themselves. Teachers, like adult learners everywhere, bring an assortment of experiences, needs, wishes, and fears to the learning process. Drawing on Kolb's learning styles and Blanchard's situational leadership model, the growth of instructors from novice to master teachers can be mapped. Progression through four developmental stages, or waves, results in an overall shift from teacher-centered to learner-centered instruction. In Wave One, the Discovery Stage, teachers are almost totally self-focused and directed. Novice teachers are often enthusiastic about accomplishing a new job or task, though they may lack some of the competencies needed to perform effectively. In this stage, teachers are especially concerned with "covering the material." In Wave Two, the Invention Stage, the self continues to be the primary focus, as teachers specialize in a particular area, and gain mastery of a specific learning and teaching style. However, at this stage, instructors also become aware of and ask questions about their "audience." In Wave Three, the Integration Stage, the self begins to be experienced more as a process and less as content, as instructors experiment with relationships among the teacher, the teaching process, and the learners. Dissatisfaction with what students are learning becomes a catalyst for inquiry, and teachers adopt new methods of instruction as they equate learning with doing. In Wave Four, the Reflection Stage, teachers perceive themselves as co-learners in and facilitators of a transformative process, marked by the actualization of learners' potential. A chart of the four stages and a short bibliography are included. (MAB)

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DEVELOPING TEACHERS: "WHEN THE STUDENT IS READY..."

THE DEVELOPMENTAL "WAVES" OF TEACHERS AS LEARNERS

Facilitated at the:
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Indonesian students honor master teachers with a special dagger. This dagger has four curves in its blade, connoting the four waves (or stages) teachers pass through as they perfect the art/science/craft/magic of teaching and learning.

Much has been written about teaching and learning. One old adage wisely advises, "When the student is ready, the teacher will appear." Most educators wholeheartedly endorse the concept of readiness as it applies to students. However, these same educators, particularly those involved in higher education, rarely have opportunities to examine how and whether this concept applies to them.

Significant literature abounds on adult learners and adult learning. Autonomous, self-directed, knowledgeable, goal- and relevancy-oriented, practical, serious: these terms and many more apply to adult learners (Lieb, 1991). Kolb (1976), Claxton and Murrell (1987), and McCarthy (1981) report the significance of teaching and learning styles. These and other authors have used phase and stage theory gleaned from developmental psychology to address and identify the recognizeable developmental periods experienced by learners. Research, again and again, documents that adults learn at different rates, in different ways, at different times.

Somehow, however, with all we know about how, when, and why adults learn, few connections seem to have been forged between this

research and the concept of teachers as learners. Teachers, like adult learners everywhere, bring an assortment of experiences, needs, wishes, and fears to the learning process. The journey from novice to master teacher, therefore, would seem to represent a passage through at least four distinct, identifiable "waves."

Kolb has identified four learning styles or stages: diverger, assimilator, converger, accomodator. He sees learners evolving from stages of concrete experience to reflective observation to abstract conceptualization, finally reaching active experimentation (Kolb, 1978).

Kolb describes learning as a four-step process. Learners have immediate concrete experience, involving themselves fully in it and then reflecting on the experience from different perspectives. From these reflective observations, they engage in abstract conceptualization, creating generalizations or principles that integrate their observations into sound theories. Finally, learners use these generalizations or theories as guides to further action, active experimentation, testing what they have learned in new, more complex situations. The result is another concrete experience, but this time at a more complex level (Claxton, 1987).

Management theory has also shed light on the issue of developmental stages or phases, as these apply to how adults, specifically adults

in the workplace, learn (Blanchard, 1988). In his Situational Leadership model, Blanchard identifies four developmental levels of individuals and groups. Each of the developmental levels is characterized by some degree of competence and commitment. Each of the corresponding leadership styles represents some combination of directive and supportive leadership behavior.

At the first developmental level, employees or groups have low competence, but high commitment. They are often enthusiastic about accomplishing a new job or task, though they may lack some of the competencies needed to perform the job effectively. At the second developmental level, some competence, but low to moderate commitment, is found. Workers have now acquired some skill or facility with the task at hand and may, therefore, begin to overestimate and tout their competency. Blanchard dubs this the "sophomoric" stage. By the third developmental stage, employees have high competence but variable commitment. They now know what they are doing, but boredom may begin to set in. The final developmental level is characterized by both high competence and high commitment. Individuals or groups have now mastered the job or task and worked through issues around commitment. In a sense, they have signed on for "the long haul" at this juncture.

Kolb's learning styles model and Blanchard's Situational Leadership have direct implications for analyzing the growth of teachers as

they make the four-wave journey from novice to master teacher. As teachers as learners develop, their perceptions of themselves as teachers, of their students as learners, of the process and content of teaching, change (See Table #1, Page 19).

John Dewey talked about change, as well: the learning process itself progresses from discovery to invention to production to reflection (Senge, 1992).

This progression from first to fourth wave is a journey from teacher-centered to learner-centered instruction. It is a journey from "teacher as god" to "teacher as learner." Let's examine this journey, each of the four waves, in more detail.

According to Claxton (1987), "the early years of one's life are a time of acquiring information and basic skills." The same can be said about the early years of one's teaching life. In Wave One, the discovery stage, the teacher is almost totally "I," or self-focused and directed. In terms of perception of self, teachers at this developmental stage view the teaching/learning process as a performance: they are the performers on stage, while the students are the (sometimes not so attentive) audience. As with any great performer, the teacher is focused on giving the very best performance she can possibly give. To this end, some teachers find it helpful to prepare a script for class. This script includes not

only hints of dialogue--"First I'll say this; then I'll say that"--but stage direction as well: "Show overhead transparency #1 here; draw diagram on board." Teachers at this stage may practice their lectures before a mirror or with a tape recorder. They meticulously review their notes before each class session and pride themselves on coming to class prepared.

In this concrete stage, "the self is undifferentiated and immersed in the world (Claxton, 1987)." Teachers are especially concerned with, almost obsessed with, "covering the material." When the learner (or the teacher as learner) has little or no information, in this case about teaching, learners need a great deal of structure, direction, external reinforcement. Their behaviors are likely to include lecturing, demonstrating, assigning, checking and transmitting content (Fuhrmann and Grasha, 1983). First-wave teachers are likely to view learners as passive, empty vessels into which as much knowledge as possible must be poured.

First-wave teachers, as any good performers, seek to master the art of enthralling the audience. Their job is to control the members of the class in order that students might pay attention to what the teacher is saying and be better for the experience. If students fail to do this, they are thought by first-wave teachers to be underprepared, unmotivated, disinterested, and unable to appreciate the importance of the knowledge being conferred upon them by the

teacher, the resident expert. Teachers see themselves as experts, authorities (Fuhrmann and Grasha, 1983). For the most part, teachers at this developmental wave believe, "I know; they [the students] don't."

With respect to the teaching process, teachers at this wave believe telling equals teaching. Determined to "cover the material," or cover the students with it, as is often the case, first-wave teachers borrow methods from their own education. Generally, this means lecture (Boyer, 1987). Glidden and Kurfiss have suggested two fears keep faculty from using techniques other than lecture as the primary instructional approach. "First, college teachers may fear they will lose control of what the students learn if they do not lecture. Second, faculty may be reluctant to adopt other approaches because they fear they will not have enough time to impart the necessary information (Hughes, 1992)." Teacher-centered instructional approaches dominate at this wave, and teaching is seen as a convergent process: usually, there is a single correct answer to most questions, and either the teacher or the textbook knows that answer. Compatible with Blanchard's model, first-wave teachers are enthusiastic performers (have high commitment), but know little about the art of teaching and learning (low competence).

Content-oriented, first-wave teachers see the substance of their

disciplines as static and finite. The teacher sees to it that students listen to, take notes about, study, and recall what she and the textbook author "know" about the all-important content being delivered. Content at this developmental wave is the absolute truth, rather than a truth. This is largely because teachers at this wave have not yet had the time or courage to critically examine or reflect upon the "truths" they want students to learn.

In a cooperative learning experiment conducted by Benware and Deci, "subjects expecting to teach were more intrinsically attracted to learning the content" (Lowman, 1991). No wonder, then, that first-wave teachers are content-oriented.

Self continues to be the focus of the second wave. In Wave Two--the Invention Wave--according to Dewey, teachers continue to develop and rely upon their distinct teaching style. "The next stage is one of specialization, in which the environment and one's own preferences move the individual to greater specialization..." (Kolb, 1978). Second-wave teachers as learners begin to rely more on a particular style of learning and become more skilled in the particular ways of grasping and transforming experience. "Here the self is defined as content as one interacts with the environment. In this stage, people move to specialization as a way of coping with a complex and multifaceted world. They develop competence in

a particular area and thereby gain some degree of mastery and security. But that mastery comes at the price of personal fulfillment, because by specializing in one mode, a person may not develop increasing skills in others (Kolb, 1978)."

Now experts in the subject matter through the process of rehearsal and practice, teachers feel comfortable enough to begin to focus less on the content and the textbook and more on perfecting their own delivery and personal style. As in Piaget's pre-operational stage, teachers now have had sufficient direct manipulation of the content to begin to examine and arrange it more abstractly. Transformed themselves by the expertise that comes from teaching a subject, teachers take pride in the accomplishment of having mastered a particular body of knowledge in a way they probably failed to when they, themselves, were students of the discipline. During this wave, teachers have familiarized themselves enough with and distanced themselves enough from what they have been teaching to engage in creating their own meaning. As teachers, they now begin to examine the relationship between content and process, hence the preoccupation with developing an effective personal style to match their new-found subject matter expertise.

As Wave Two teachers begin to perfect their performance skills and focus on the relationship between content and process, they also begin to notice things about the members of their "audience" and

their role in the process. Having ventured out from behind the lectern, the teacher now begins to view the front of the classroom from the perspective of a student. As she walks around the room while she lectures, she notices curious things about the students. Some members of the audience appear distracted. The copious notes they appear to be taking turn out to be doodles and, is some cases, outright scrawls. One or two students are always the first to thrust their hands into the air when a question is asked, but the majority of the audience members rarely raise their hands, answer questions, or visit the professor during office hours.

All of these curious behaviors would seem to signal that there is some question about whether audience members are as enraptured by the teacher's performance as she is. The second-wave teacher muses, "I know, but do they?" Generally speaking, however, these beginning questions about what and, indeed, whether the students are paying attention to the teacher's performance are somewhat troubling but can usually be explained away by the realization that students probably do not have the requisite skills demanded by the course or discipline. Learners, for teachers at the second wave, are often perceived as needing to study, work, and think harder. Since teachers believe they have proven expertise in the discipline and are engaged in processes to continually improve their performance and style, disparities in their content versus process paradigm must rest with inadequacies in their students. Like

employees at Blanchard's second developmental level, second-wave teachers are developing some competence (with teaching), though they may overestimate their ability to facilitate learning, no matter how entertaining the lecture.

And what do these teachers believe about process? They believe that telling with flair and style equals teaching. They invent their own style and adopt methods compatible with this style. With respect to content, they render stylized versions of the information housed by their discplines. The resources at their disposal sometimes seem contradictory or even inadequate. Students point out mistakes in the text. Teachers find holes in the logic. These observations lead teachers to question and examine a content that is becoming not so much the truth as a truth.

But "truth" and content cease to be the primary issues of third-wave teachers as learners. In Wave Three, according to Claxton, the teacher begins to experiment with relationships among the teacher, the process of teaching, and the learners in the classroom. Probably because the content has become so familiar and the teacher's performance has become almost "automatic," the teacher becomes a little weary of delivering the same performance, day after day. The addition of more humor, more examples, more "war stories" doesn't seem to stave off nagging dissatisfaction, bordering on boredom. Like employees at the third developmental

level of Blanchard's Situational Leadership model, third-wave teachers are likely to have moderate to high competence but variable commitment.

Year after year, class after class, the teacher has seen different faces pass through her classroom. Faces are beginning to blur into a parade of seemingly disinterested, disenchanted new audiences. In the third wave, Integration, according to Dewey and Claxton, the self begins to be experienced more as process and less as content (Claxton, 1987). Bored, frankly, with continuing to deliver the same lines about the same content, the teacher begins to focus more and more on the faces of the audience members.

Something dramatic usually happens at this stage. The teacher may notice that most students seem to get some questions on the examination correct, but they consistently miss others. Or even that after a particularly stellar performance, or so the teacher thought, students still don't seem to grasp the concepts being taught. In an effort to account for these anomalies, the teacher begins to question what it is that students are actually learning. From the teacher's perspective, the material is getting easier and easier, this because the teacher has had the benefit of significant rehearsal. That is, he or she has "taught" the same material again and again and, by such exposure to it, the material invariably becomes more and more familiar to the teacher. She can't

understand why the course content seems to be so difficult for students. The students, on the other hand, seem to getting less and less bright. Either that or there are some variables in the teaching/learning process of which the teacher, heretofore, has been unaware.

"Kolb's thesis of human development, then, is that increasing competence and experience...lead to greater complexity, relativism, and integration (Claxton, 1987)." A certain amount of dissatisfaction has set in, and this dissatisfaction becomes the catalyst for inquiry and reflection. The teacher, at least according to her own observations, has not produced the desired results. She is teaching, but students are not learning. In order to explain this perplexing dilemma, the teacher may begin to create and adopt new instructional methods. This is a "period that requires an existential confronting of the conflict between the need for specialized competence and the need for personal fulfillment (Claxton, 1987)".

"People feel a need to come to terms with their lives as they have experienced them thus far and to bring into play parts of themselves that have been relatively dormant (or suppressed) until then. The self begins to be experienced less as content and more as process and transacting with the world (Claxton, 1987)."

With respect to her perception of learners, the teacher now finds them challenging. The realization that learners bring a great deal to the learning process has begun to set in. Students have a role in the learning process, and the teacher is determined to discover just what that role is and how she can impact it. Because of this, learners become more like subjects, co-participants, albeit unwitting, in a grand experiment designed to unlock the mystery of if, how, and whether teaching can occur unless learning does.

Teachers at Wave Three begin to equate learning with doing. In terms of process, these teachers are results-oriented. They borrow methods from innovative practices. They are like mad scientists, trying any new method that might work. In some instances, the process of teaching and learning may become more important than the content of the discipline. Teachers at this wave display the collaborative learning style documented in the Jacobs/Fuhrmann social interaction research. As collaborators, these teachers have "some knowledge, information, and ideas and would like to share them or try them out (Claxton, 1987)." They have greater needs for interaction, practice, and observation and enjoy experimentation and delving into themselves and others. Their behavior involves "interacting, questioning, modeling, coordinating and managing and observing processes (Fuhrmann and Grasha, 1983)."

The content has now been critically examined and becomes perceived

more as a vehicle for learning, more a means to an end than an end in itself. "In some fields, the information half-life (the time it takes for half the knowledge base to become obsolete) is less than six years (Sheridan, 1987)." The realization that facts change, in fact are in a perpetual transformative state, has begun to sink in. A national study reveals that "many professors' interests and values 'turn away from research and toward teaching with increasing age'" (Fulton and Trow, 1974). Probably the most important event that occurs at Wave Three is that content is integrated with methods and the needs of the learners. That is, content ceases to be perceived as a stand-alone commodity, but rather a tapestry through which instructional methodology, student preparation, classroom resources and textbooks must be weaved. Wave Three teachers ask the question, "What do I know? What do they?" Third-wave teachers begin to question their practice. More than that, they begin to question the practices of the students in their classrooms. This wave marks the shift from an "I-centered" focus to a "they-centered" focus. A little dissatisfaction on the part of the teacher and evidence from students that what is being taught isn't necessarily being learned are the hallmarks of the third wave. In his book The Fifth Discipline, Peter Senge (1990) labels this phenomenon "creative tension"--the psychological distance between ideal vision and current reality.

This preoccupation with what is actually being learned dominates

teaching practice at the fourth wave. Dewey characterizes the last stage of learning as a reflective one. Actualization of self and others becomes the goal of this reflection (Claxton, 1987). By the fourth or master-teacher wave, this transition from teacher-centered to learner-centered focus continues. The teacher perceives herself as a co-learner in a transformative process. Content and knowledge are no longer the supreme objective; change and transformation are. Teachers at this wave realize that learners bring distinct and well-developed skills and abilities to the learning process. Learners are not empty vessels into which knowledge must be poured, but rather complete beings in and of their own right. The goal now becomes helping learners modify, restructure, and expand the many "files" they already have stored in their minds. The goal now becomes a joint effort among learners to uncover, share, and reconstruct all they have to learn and all they have to teach--together.

The teacher's (co-learner's) role becomes one of climate control and obstacle removal. Her job becomes helping other learners remove or circumvent obstacles that keep them from being actively engaged in their own learning. That is, her job is to facilitate her transformation as well as that of those who have agreed to learn with her. Teachers at the fourth wave reflect on their experimentation and perceive themselves, rather than students, as the audience. "This empowering experience--learning how to learn--

is a critical ingredient in a student's college experience (Smith, 1982)." This learning to learn would doubtless be an essential part of a teacher's learning experience, as well.

Fourth-wave teachers perceive learners as active, self-directed performers, integral parts of the learning process. Learning now equals transforming. And a good deal of this transforming comes from the teacher's reflection upon her methods and materials and the response to these of her co-learners. The goal of the learning becomes actualization. Divergence is used to achieve that goal, as is learner-centered instruction and learner-centered classroom climate.

Part of developing this learner-centered instruction comes from critically reflecting upon the content of the discipline, paring it to only that needed to effect student learning. Content is perpetually acted upon by the learner and it becomes a puzzle to be unraveled rather than a hurdle to be overcome.

Jacobs and Fuhrmann's social interaction model profiles three learning styles: dependent, collaborative, and independent (Fuhrmann and Grashsa, 1983). The independent style characterizes the Wave Four teacher as learner. Independent learners (teachers), with substantial knowledge and skill, have much more internal awareness. They function much more as facilitators who "allow,

provide request feedback, provide resources, consult, listen, negotiate, and evaluate (Fuhrmann and Grasha, 1983)."

As with Blanchard's fourth developmental level, teachers now have both high competence and high commitment. In the fourth wave, the master teacher (or more accurately, the masterful teacher) concentrates on helping learners, herself included, actualize their own potential, become the best of who they can be. When asked what it is that she teaches, fourth-wave teachers won't reply, "English, sociology, or auto mechanics," They'll say, "people." Teaching content and teaching people are entirely different things, and the developmental stages that teachers progress through help them move from teaching content and subjects to learning with people.

The curved dagger symbolizes a master teacher's journey well. This journey has treacherous curves in it. Often it seems to take paths that lead nowhere or, worse yet, to abject confusion. The road is long and arduous. Many of its winding curves have slippery, steep precipices. Many teachers do not risk the journey at all. Some may elect to stay at the first wave, with its predictablity and illusion of control. This can lead to staleness, sterility, calcification. Some may find the second wave comfortable. This can lead to entertainment, diversion, and fun, but little learning. Wave Three may offer a comfortable respite, at least for awhile. But too long at this wave will likely beget burnout and discontent.

Sometimes this path leads to a road, a career change, that has nothing to do with the difficult business of teaching at all. Wave Four can have its pitfalls, as well. In its worst form, it can lead to abdication, a total forfeiture of teacher as facilitator, teacher as co-learner in a transformative process.

The journey is long and difficult. Some can't make the journey at all. Teachers, as they travel from the first to the fourth wave, evolve from a focus on content in Wave One to an emphasis on process in Wave Two. In Wave Three, learners (students) become the emphasis, and finally, in Wave Four, educators place their emphasis on teaching--teaching as learning (Cheatwood, 1992). The curved dagger is a fitting reward. Still, "When the teacher is ready, ..."

DEVELOPING TEACHERS

PERCEPTIONS OF:	WAVE 1 DISCOVER	WAVE 2 INVENT	WAVE 3 PRODUCE	WAVE 4 REFLECT *
	"I know; they don't"	"I know; do they?"	"What do I know? What do they?"	"I know! We know, but we don't know we know."
TEACHER	performer responsible for selecting and delivering content control oriented unaware of relationships among learning variables	creating own meaning examining relationship between content and process	creating/adopting new methods experimenting with relationships between process and learners dissatisfied	facilitating own and others' learning reflecting on experimentation audience
LEARNER	naive listener empty vessel passive audience	needs to study, work, think harder seems disinterested	challenging subject frustrated brings much to learning process	performer active self-directed integral part of learning process
PROCESS	telling=teaching cover the material methods borrowed from own education convergent teacher-centered	telling with flair=teaching inventing own style methods adapted to suit unique style	learning=doing results-oriented methods borrowed from innovative practices more important than content	learning=transforming reflecting upon methods, materials actualizing divergent learner-centered
CONTENT	content-oriented unexamined mine-belongs to me the truth static; finite	personal style-oriented examination beginning a truth sometimes contradictory, inadequate	critically examined vehicle for learning process dynamic questions integrated with methods, needs of learners	critically reflected upon pared to only that needed to effect learning perpetually acted upon by learner puzzle

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June, 1992

* John Dewey

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